

### REMARKS

Claims 1-7 are pending. Claims 3 and 6 have been amended to clarify the invention. No new matter is added as a result of these amendments.

The specification has been amended by replacing the paragraph on page 1, beginning at line 6 with a new paragraph to correct the claim to priority of application Serial No. 09/270,829 instead of application Serial No. 09/270,279.

### **The Nonstatutory Double Patenting Rejection of Claims 1-7**

Claims 1-7 have been rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,232,519 B1. The Office Action contends that, although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are broader than claims 1-7 of U.S. Patent No. 6,232,519 B1. Applicants respectfully traverse this rejection.

It is well established that a double patenting rejection cannot be based on the disclosure of another application or patent, but rather must be based on the claims thereof, which define the invention that is patented or to be patented in that application. In re Kaplan, 789 F.2d 1574, 229 USPQ 678 (Fed. Cir. 1986). Mere domination or overlapping does not necessarily give rise to obviousness-type double patenting. Ibid.

The claims of the '519 patent recite a method for neutralizing a mine or unexploded ordnance comprising reacting a reactive compound that undergoes a self-propagating high temperature synthesis (SHS) reaction. The reactive compound is an

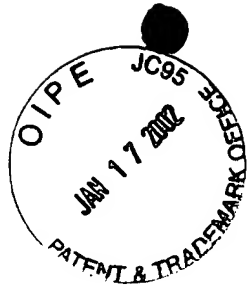
essentially stoichiometric combination of sulfur and a metal selected from the group consisting of zirconium, chromium, indium, titanium, manganese, iron, and blends thereof. In contrast, the claims of the subject application recite that the reactive compound may be an essentially stoichiometric combination of sulfur and a metal selected from the group consisting of zirconium, chromium, indium, titanium, manganese, iron, and blends thereof or an essentially stoichiometric combination of carbon and a metal selected from the group consisting of hafnium, zirconium, titanium, silicon, and blends thereof.

In comparing the claims of the '519 patent to applicants' claims, applicants submit that claims 1-7 would not have been obvious in view of the claims of '519 patent. No reasons are given in the Office Action for establishing obviousness-type double patenting other than a statement that applicants' claims are broader than those of the '519 patent. However, the mere fact that a claim dominates or is broader in scope than another claim does not establish obviousness-type double patenting. For all of these reasons, applicants assert that the Office Action does not make out a *prima facie* case of obviousness-type double patenting and respectfully request that the obviousness-type double patenting rejection be withdrawn.

**The Rejection of Claims 3, 6, and 7 Under 35 U.S.C. § 112, Second Paragraph**

Claims 3, 6, and 7 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 3 and 6 allegedly used terms lacking proper antecedent basis.

It is respectfully submitted that amended claims 3 and 6 are not indefinite. Claim 3 as amended recites proper antecedent basis for "the overburden." Claim 6 as amended no longer recites "the content of the casing" and instead recites "the explosive material." Also, claim 6 has been amended to replace all occurrences of the term "explosive" and "the explosive" with the term "the explosive material," which is used in the preamble. Applicants submit that these amendments to claim 6 render the rejections under 35 U.S.C. § 112, second paragraph, moot and respectfully request that these rejections be withdrawn.



CONCLUSION

Accordingly, in view of the above amendments and remarks, this application is now believed to be in condition for allowance, and such action is respectfully requested. This response is believed to completely address all of the issues raised Examiner's Office Action dated July 17, 2001.

Respectfully submitted,

By: Paul M. Rivard

Paul M. Rivard  
Registration No. 43,446

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BANNER & WITCOFF, LTD.  
Eleventh Floor  
1001 G. Street, N.W.  
Washington, DC 20001-4597  
(202) 508-9124 (phone)  
(202) 508-9299 (fax)

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TC 1700



**VERSION OF REPLACEMENT PARAGRAPH WITH  
MARKINGS TO SHOW CHANGES**

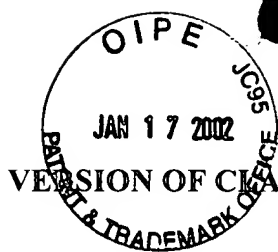
In the specification at page 1, beginning at line 6:

This application is a continuation of application Serial No. [09/270,279]09/270,829, filed March 18, 1999, now U.S. Patent 6,232,519 B1, which is a continuation of application Serial No. 08/976,493, filed November 24, 1997, now abandoned, the disclosure of each of which is hereby incorporated by reference in its entirety.

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VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES

3. (amended) The method of claim 1 wherein the mine or unexploded ordnance [is ]at least partially contacts an overburden[ed by] comprising ground or debris, [and]said method further comprising removing at least a part of the overburden therefrom by a release of gas.

6. (amended) A method for neutralizing a mine or unexploded ordnance having a casing comprising explosive material, said method comprising:

(a) reacting a compound that undergoes a self propagating high temperature synthesis (SHS) reaction to form high temperature reaction products in quantity and at a rate sufficient to decompose the [content of the casing]explosive material, wherein the reaction products are mostly liquid;

(b) limiting the spread of the liquid high temperature reaction products;

(c) supplying an oxygen-rich gas stream to the casing or to the explosive material to enhance decomposition of the casing or burning or decomposition of the explosive material; and

(d) decomposing the [content of the casing]explosive material by heating the casing with the high temperature reaction products for a time and at a rate sufficient to increase the pressure in the casing to cause the casing to fracture and, before the explosive material detonates, to (i) scatter the explosive material or (ii) burn or decompose the explosive material for a time sufficient to destroy the explosive material;

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wherein the reactive compound is selected from the group consisting of (i) an essentially stoichiometric combination of sulfur and a metal selected from the group consisting of zirconium, chromium, indium, titanium, manganese, iron, and blends thereof and (ii) an essentially stoichiometric combination of carbon and a metal selected from the group consisting of hafnium, zirconium, titanium, silicon, and blends thereof; and

wherein the reactive compound consists essentially of particles having particle size less than about 100 microns.